

R E M A R K S

Reconsideration of this application, as amended, is courteously solicited.

The period for response to the Office Action of January 26, 2001 has been extended by three months to and including July 26, 2001 by the Petition For Extension Of Time attached hereto and made a part hereof. Favorable action with respect thereto is courteously solicited.

THE OFFICE ACTION OF JANUARY 26, 2001

The Office Action of January 26, 2001 does not indicate whether or not the drawings has been accepted. Clarification as to this issue is respectfully requested.

The Office Action objected to claims 12 and 13 *"because the claims are identical, and therefore one of these claims must be amended or canceled."* In response thereto, claim 12 has been cancelled hereby, without prejudice to the claims remaining in the case. Favorable action thereon is courteously solicited.

The Office Action rejected claims 1 through 4 under 35 U.S.C. 102(a) *"as being anticipated by Applicant's admission (instant specification on page 3, last 6 lines and page 10, first 4 lines). The applicant admits that a known method for treating water containing excess ozone comprises treating the water with sodium bisulfite to quench the ozone."* Claims 1 through 4 have been amended, without prejudice, more clearly to distinguish over the prior art, as will hereinafter be discussed in greater detail. The allowance of claims 1, 2, 3 and 4 is therefore courteously solicited.

The Office Action rejected claims 1 through 9 and 11 through 15 under 35 U.S.C. 102(a) *"as being anticipated by Richey et al. in 'Improved Ozone Quenching With Calcium Thiosulfate.'* Richey et al. teach a method for treating water comprising disinfecting the water with ozone in a treatment system, wherein the system includes an ozone quenching system. In the ozone quenching system, an ozone quenching chemical is added directly to the water as it passes through the treatment system, in an amount to reduce the dissolved ozone concentration to non-detectable levels without reacting with chlorine added downstream to produce by-products. The untreated water provided to the treatment system of Richey et al. would not be potable without the treatment, and therefore may be considered as wastewater. Richey et al. teach that calcium thiosulfate has advantages as the ozone quenching chemical."

In response thereto, the applicant hereby respectfully notes that Richey et al. is not prior art relative to the subject invention under 35 U.S.C. 102 and thereby cannot be relied upon in rejecting any claims in this case. As stated clearly on the last page of Richey et al., it was presented at the International Ozone Conference in Orlando, Florida, on October 3, 2000. The instant patent application was filed in the United States Patent and Trademark Office on February 23, 2000 more than seven (7) months before. Accordingly, the applicant respectfully requests that the citation of and reliance upon Richey et al. be withdrawn.

The Office Action rejected claims 1, 2, 5 and 6 under 35 U.S.C. 102(b) *"as being clearly anticipated by Wickramanayake (column 4, lines 47-52; column 9, lines 56-59).* In this method of Wickramanayake, the work material is a gas mixture that has passed through soil; the target constituent is ozone; the treating agent is sodium thiosulfate; and the objective is to quench the ozone." It is readily apparent that the Wickramanayake patent neither discloses nor suggests the applicant's invention as defined by the pending claims. It discloses only a method

for treating soil through which a gas-ozone mixture is passed. In other words, the gas-ozone mixture is used to treat the soil to remove contaminated organic compounds. The applicant's invention is entirely different and for a different purpose.

The Office Action rejected claims 1 and 3 under 35 U.S.C. 102(b) "*as being clearly anticipated by Daignault et al. (abstract; column 1, lines 11-14). In this method of Daignault et al., the work material is a waste solution such as a waste water stream; the target constituent is heavy metals bound to complexing agents; the treating agent is peroxide and ozone; and the objective is to destroy the complexing agents and facilitate the removal of heavy metals.*" These claims have been amended more clearly to distinguish over the prior art and the allowance thereof is respectfully requested. Favorable action thereon is courteously solicited.

The Office Action rejected claims 1, 2, 5 and 6 under 35 U.S.C. 102(b) "*as being clearly anticipated by Hagen et al. (abstract; column 18, lines 47-61). In this method of Hagen et al., the work material is a fluid; the target constituent is an oxidant such as ozone; the treating agent is oxidant scavenger particulates which may be sodium thiosulfate particulates; and the objective is to remove the oxidant.*" Again, the subject Hagen et al. reference does not disclose nor suggest the applicant's invention. Therefore, these claims, as amended, are believed clearly allowable. Favorable action thereon is respectfully requested.

The Office Action rejected claims 1 and 3 under 35 U.S.C. 102(b) "*as being clearly anticipated by Horn et al. (abstract). In this method of Horn et al., the work material is photoprocessing wash water; the target constituent is silver thiosulfate complex; the treating material is acrylic anion exchange; and the objective is to remove the silver thiosulfate complex.*" Claims 1 and 3, as amended, are believed clearly, patentably to distinguish over Horn et al. The allowance thereof is respectfully requested.

The Office Action rejected claim 10 under 35 U.S.C. 103(a) "as being unpatentable over Richey et al. Richey et al. disclose the method described above. The claim differs from Richey et al. by reciting a specific rate of calcium thiosulfate application to the water. It is submitted that one of ordinary skill in the art, when practicing the method of Richey et al., would have been expected to arrive at the optimum rate of calcium thiosulfate application by routine experimentation. In fact, Richey et al. disclose that the ozone quenching agent dose is a function of the ozone concentration in the water, and should be adjusted to reduce the dissolved ozone concentration without adding so much of the agent that the unoxidized agent would react with chlorine added downstream. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the present invention was made, to have applied calcium thiosulfate to the water in the amount recited in instant claim 11, depending on the concentration of dissolved ozone in the water being treated, absent a sufficient showing of unexpected results."

As heretofore discussed, the Richey et al. patent is not believed to be prior art to the instant patent application. Therefore, it is believed claim 10 is allowable. The allowance thereof is respectfully requested.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

1. (Amended) A method for treating a fluid work material containing a target constituent comprising the steps of presenting said work material for treating in accordance with said method; and applying a [treating agent] thiosulfate to said work material operable to treat said work material to achieve a predetermined objective relative to the target constituent in said work material.

6. (Amended) The method of claim [5] 4 wherein said treating agent is a thiosulfate selected from the group consisting of calcium thiosulfate, potassium thiosulfate, sodium thiosulfate and ammonium thiosulfate.

THE PERSONAL INTERVIEW

The Examiner has helpfully agreed to a personal interview to be held in this case between the Examiner and the applicant's attorney, Rodney K. Worrel, on August 14, 2001 at 10:00 a.m. The interview is to be held in the Examiner's office in the United States Patent and Trademark Office. The applicant wishes to thank the Examiner for her courtesy and cooperation in this regard.

DISTINCTIONS IN CLAIMED INVENTION OVER CITED PRIOR ART

Those claims rejected in the Office Action of January 26, 2001 were rejected on the basis of the Richey et al. "Improved Ozone Quenching With Calcium Thiosulfate; Wickramanayake United States Patent No. 5,269,943; Daignault et al. United States Patent No. 4,332,687; Hagen et al. United States Patent No. 5,700,375; and Horn et al. United States Patent No. 5,500,125. The claims, as amended, are believed clearly allowable thereover for the reasons heretofore set forth.

CLAIMS REJECTED UNDER 35 USC SECTION 102

The case law under 35 USC 102 is well developed on the issue of anticipation and what requirements must be met for such a rejection to withstand judicial scrutiny. As stated in Pfizer, Inc. v. International Rectifier Corp., 207 USPQ 397, 425 (D.C. CALIF. 1980), anticipation:

"is strictly a technical defense. Unless all the same elements are found in exactly the same situation and united in the same way to perform the same identical functions in a single prior art reference, there is no anticipation.' . . . The information conveyed by prior art is crystallized as of the date it is made public and the crystals cannot be corrected or altered to convey information or facts later acquired by others skilled in the art."

This standard has consistently been applied by the United States Court of Appeals for the Federal Circuit. For example, that court in In re King, 801 72d. 1324; 231 USPQ 136, 138 (CAFC 1986) said:

"It is axiomatic that anticipation of a claim under Section 102 can be found only if the prior art reference discloses every element of the claim . . ."

It is respectfully submitted that the pending claims are not anticipated under 35 USC Section 102 as hereinafter set forth.

CLAIMS REJECTED UNDER 35 USC SECTION 103

The United States Court of Appeals for the Federal Circuit in In re. Sernaker, 702 F.2nd 989, 217 USPQ 1, 5 (CAFC 1983), set forth the proper test to be applied under 35 USC Section 103 when a combination of prior art references is applied in an attempt to find an invention to be "*obvious*" as claimed. The court stated, at page 5, that it must be determined:

"that all the prior art references . . . are sufficiently related to one another and to a related and common art, that the hypothetical person skilled in the art must be presumed to be familiar with all of them. That being so, the next questions are (a) whether a combination of the teachings of all or any of the references would have suggested (expressly or by implication) the possibility of achieving further

improvement by combining such teachings along the line of the invention in suit, and (b) whether the claimed invention achieved more than a combination which any or all of the prior art references suggested, expressly or by reasonable implication."

Therefore, in each of the latter two tests the crucial element is "suggestion", either expressed or implied.

The predecessor Court of Customs and Patent Appeals considered the same issue in the Application of Shaffer, 229 F.2d 476, 479; 108 USPQ 326, 328-329 (CCPA 1956). The court said:

"It is too well settled for citation that references may be combined for the purpose of showing that a claim is unpatentable. However, they may not be combined indiscriminately, and to determine whether the combination of references is proper, the following criterion is often used: namely, whether the prior art suggests doing what an applicant has done. ... The foregoing cases, in our opinion, stand for the proposition that it is not enough for a valid rejection to view the prior art in retrospect once an applicant's disclosure is known. The art should be viewed by itself to see if it fairly disclosed doing what an applicant has done. If the art did not do so, the references may have been improperly combined."

It is therefore not proper to take bits and pieces of references and use those bits and pieces to support a position not suggested by the individual references but taught rather by the applicant. Thus, as stated by the same court in In Re. Umbrecht, 1600 USPQ 15, 19 (CCPA 1968):

"It is impermissible within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art."

It is respectfully submitted that all of the pending claims are clearly allowable over the prior art in view of the legal standards above set forth.

In view of the foregoing, this application is believed to be in condition for allowance.

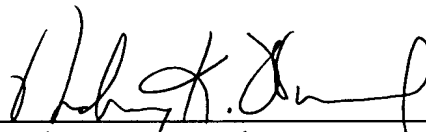
Therefore, prompt Notice of Allowance of the subject application, including claims 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14 and 15 is respectfully requested.

The applicant, through his attorney of record, authorizes the Examiner to telephone the attorney collect in the event a telephone discussion could be helpful to the prosecution of this application.

Respectfully submitted,

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